

## Facsimile Cover Sheet

To: William E. Tapolcai

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From: Jeremy J. Sanger Phone: 810 366 9579

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Date: January 3, 1997

Comments: My Patent application - S/N: 08/585,207

Dear Mr. Tapolcai

My Patent Attorney, Charles Chandler, recently forwarded to me your response to my patent application relating to an Automotive Liquid Heat Generator.

I would be grateful if you could spare a few minutes to review my following notes that comment on your rejections on the grounds of 'obviousness'.

My invention incorporates a rotor and stator assembly within a housing that incorporates annular opposing cups, angled at 45 degrees, within the rotor and stator assembly.

The array of feed openings within these cups precisely control water and air entering and leaving the unit.

The design detailed in my patent results in a toroidal vortex being generated within the enclosure (please see my illustration Fig.8 within my application). The action of rotating the shaft and rotor causes the vortex to be sheared. The energy required to do so is then transferred to the water as heat. The creation of this vortex, effectively a solid mass, is critical for the unit to perform efficiently within a small and confined space.

Within the "background of Invention" of my application, I refer to the Jacob's patent that refers to his product as a 'pump' and clearly his design is of great similarity to that of a centrifugal pump typically found within an automobile engine.

His design shows a rotor with cups that are axially vaned (not angles at 45 degrees). The opposing annular channel with no buckets is again similar to a typical centrifugal pump. He does not have opposing vanes because he is trying to design a pump that simply agitates the water causing some hydraulic friction. He is clearly depending on the unit to pump the fluid around the vehicle cooling system and therefore it was not obvious to add the cups and vanes to the opposing stator for this would result in the loss of pumping capability.